

## Section 35.1-25.1. Landscaping.

It is the intent of the Landscaping Ordinance to promote the public necessity, convenience, general welfare and good zoning practice by incorporating landscaping, screening and tree preservation requirements into the development review process. The goals are to provide landscaping requirements that will: ensure development consistent with the goals of the Comprehensive Plan; reduce soil erosion; increase infiltration in permeable land areas to improve stormwater management, mitigate air, dust, noise and chemical pollution; reduce heat island effect; protect property values, provide buffers between incompatible uses; preserve existing natural vegetation as an integral part of the City and ensure that the City remains an attractive place to live, visit and work.

### Section 35.1-25.1.1. Severability Clause.

As provided in Section 35.1-3, if any provision of the Zoning Ordinance regulating landscaping is declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of the Zoning Ordinance regulating landscaping and all of such provisions shall remain in full force and effect.

### Section 35.1-25.1.2. Definitions.

**Buffer:** An area of land, including landscaping, or combination of landscaping berms, solid fences and or walls that is located between land uses of different character and is intended to mitigate negative impacts of the more intense use.

**Caliper:** Trunk diameter measured six (6) inches from the ground. If the caliper is greater than four (4) inches, the measurement is taken twelve (12) inches from the ground.

**Decorative Landscape Stone:** Stone that has natural or manmade distinguishing characteristics such as color and shape. Decorative landscape stone may be used as a mulch.

**Evergreen Tree:** A tree or shrub that has foliage that persists and stays green throughout the year.

**Foundation Planting:** Trees and shrubs planted along and adjacent to the perimeter of a building.

**Ground Cover:** Any evergreen or broadleaf plant that does not generally attain a mature height of more than one (1) foot, characterized by a growth habit in which the plant spreads across the ground to connect with other similar plants forming a continuous vegetative cover on the ground. Sod & seeding shall be considered an appropriate ground cover.

**Heat Island Effect:** An elevated temperature over an urban area caused by pavement, buildings, other infrastructure and pollutant emissions

**Landscape Island:** An area containing required landscaping not less than one hundred eight (108) square feet for a parking row or two hundred sixteen (216) square feet for a parking bay.

**Mulch:** A protective covering, usually of organic matter placed around plants to prevent evaporation of moisture, the freezing of roots and the growth of weeds.

**Naturalized Planting Area:** Any area planted for bioretention containing native or indigenous species that mimics local natural surroundings and is allowed to grow undisturbed. Naturalized Planting Areas require minimal maintenance.

**Ornamental Tree:** Deciduous tree that grows to a mature height of less than thirty (30) feet with flowering or other distinguishing characteristics.

**Parking Bay:** Two (2) parking rows abutting one another.

**Parking Row:** One (1) single line of parking spaces.

**Raising:** Providing vertical clearance under tree canopy by using appropriate pruning techniques.

**Rip Rap:** A permanent, large, loose angular stone generally used for erosion and sediment control in concentrated high velocity flow areas.

**Screening:** A method of visually shielding or obscuring items such as a structure, receptacle, parking area, equipment or stormwater management pond by densely planted landscaping, or a combination of landscaping, berms, solid fences and or walls.

**Shade Tree:** Deciduous tree that grows to be more than thirty (30) feet at maturity and planted chiefly to provide shade from sunlight.

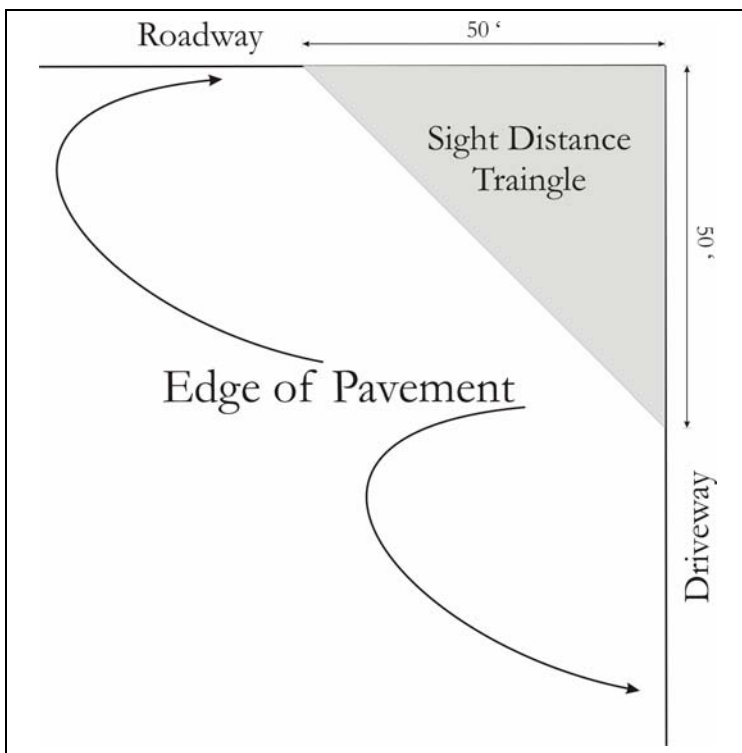
**Shrub:** A woody plant deciduous or evergreen that generally exhibits several erect, spreading stems with a bushy appearance growing to a height of no more than fifteen (15) feet.

**Shrub Small:** A shrub with a minimum height of one (1) foot at planting.

**Shrub Medium:** A shrub with a minimum height of two (2) feet at planting.

**Shrub Large:** A shrub with a minimum height of three (3) feet at planting.

**Sight Distance Triangle:** A straight line with unobstructed view measured fifty (50) feet along the edge of pavement lines from their points of junction with points being three (3) feet above the pavement edge.



*Sight Distance Triangle*

**Slope:** The deviation of a surface from the horizontal.

**Topping:** An inappropriate practice of making heading cuts through a stem more than two (2) years old that drastically reduces tree height, destroys tree architecture and results in discoloration, decay of the cut stem or death of the tree.

**Water Feature:** A stormwater management structural measure such as a stormwater retention pond, bioretention, forebay, or landscape garden pond that

is wet permanently or intermittently during rain events and contains landscaping that is hydric or water tolerant.

Section 35.1-25.1.3. General Regulations.

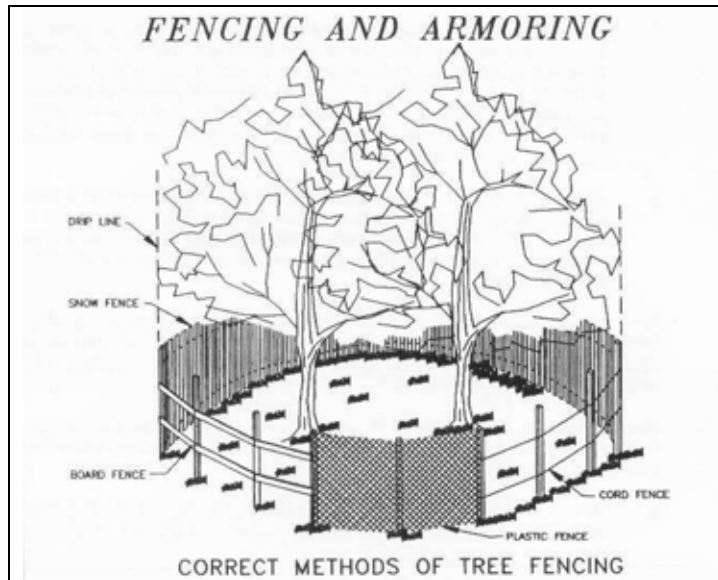
- (a) Landscaping within a sight distance triangle shall not include any evergreen trees, and shall not include shrubs exceeding three (3) feet in height above the ground at maturity. Tree limbs within a sight distance triangle shall be raised to ensure visibility for motor vehicle safety, but in no case shall tree limbs be raised more than sixteen (16) feet above the ground.
- (b) When a determination of the number of trees or shrubs results in a fraction, any fraction shall be rounded up to count as one (1) tree or shrub.
- (c) Existing vegetation within the construction area and at least three (3) inches in caliper that meets the requirements of the Landscaping Ordinance as determined by the City Planner or designee may be preserved and may be used to meet all or part of the landscaping requirements.
- (d) Removal of healthy trees eighteen (18) inches or greater in caliper is discouraged. For each healthy tree eighteen (18) inches or greater in caliper that is retained within the construction area a credit of twelve (12) trees shall be given towards meeting the requirements of the Landscaping Ordinance.
- (e) All landscaped areas shall be covered with an appropriate ground cover, mulch or decorative landscape stone. Where mulch or decorative landscape stone is used, it shall be installed to a depth of not less than three (3) inches. The use of gravel and/or riprap is prohibited.
- (f) All slopes shall be covered with an appropriate ground cover. The use of riprap for stabilization of any slope visible from a public or private street, or residential district is prohibited except for concentrated high velocity flow areas as approved by the City Planner or designee.
- (g) All retaining walls visible from any public or private street or residential district shall be constructed of segmental block, brick or stamped and colored concrete that gives the appearance of brick or stone. Retaining walls of other materials are permitted provided that they are supplemented with landscape material as follows:
  - 1. Retaining walls less than eight (8) feet in height, one (1) large evergreen shrub per three (3) linear feet of wall.

2. Retaining walls eight (8) feet in height or greater, one (1) large evergreen shrub per three (3) linear feet of wall and one (1) ornamental tree per twenty (20) linear feet of wall.
- (h) All trees used to satisfy the requirements of the Landscaping Ordinance shall be in accordance with the City's Master Tree List. The City's Master Tree List shall be maintained by the City's Urban Forester. The City's Urban Forester may require the substitution of a different species of tree in circumstances of disease, drought or overhead utility lines.
  - (i) No tree, shrub and/or ground cover contained on the Invasive Alien Plant Species of Virginia list as maintained by the Department of Conservation of Virginia (DCR) and the Virginia Native Plant Society may be planted or used to satisfy any portion of the Landscaping Ordinance.
  - (j) Where the planting of trees that have a height at twenty (20) year maturity would interfere with overhead utility lines, the Urban Forester may as part of the site development plan approval require the substitution of a tree with lesser maturity height or allow placement of trees in a manner that will not interfere with overhead utility lines, provided that the general intent and purpose of the Landscaping Ordinance is met.
  - (k) All open areas not used for operations, including slopes shall be landscaped at the rate of twenty (20) trees per acre. Required trees may be any combination of deciduous or evergreen and may be placed in creative groupings.

#### Section 35.1-25.4. Landscaping Plan Required.

When required as part of a preliminary or final site development plan, a landscape plan shall indicate the following information:

- (a) The location, size, height at planting and botanical name of all required landscaping.
- (b) The location, size and botanical name of any existing landscaping proposed to be used or required to satisfy any portion of the Landscaping Ordinance.
- (c) The dimensions of all required landscape islands.
- (d) A tree protection detail as specified in "STD & SPEC 3.38, Tree Preservation and Protection," in the 1992 edition of the Virginia Erosion and Sediment Control Handbook for all landscaping proposed or required to be preserved to satisfy the requirements of the Landscaping Ordinance.



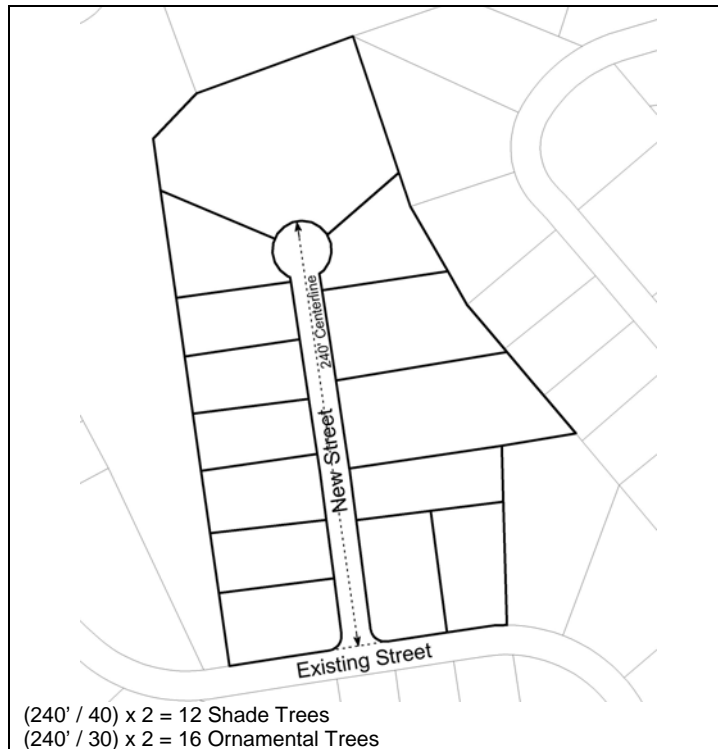
*Tree Protection Detail*

- (e) A planting detail for all trees, shrubs and ground cover used to satisfy the requirements of the Landscaping Ordinance.
- (f) A planting, fertilization, and watering schedule for all trees, shrubs and ground cover used to satisfy the requirements of the Landscaping Ordinance.
- (g) A description of soil amendments necessary to support the growth of all required trees and shrubs.

#### Section 35.1-25.5. Residential Landscaping.

In the event of the subdivision of any land for residential purposes where it is proposed that new City streets will be dedicated or existing City streets will be extended to serve said subdivision the following landscaping requirements apply:

- (a) Shade type trees shall be planted at the rate of two (2) trees for every forty (40) feet of the new street centerline or Ornamental trees may be substituted at the rate of two (2) trees for every thirty (30) feet of the new street centerline.



*Calculation of Street Trees for New Residential Subdivisions*

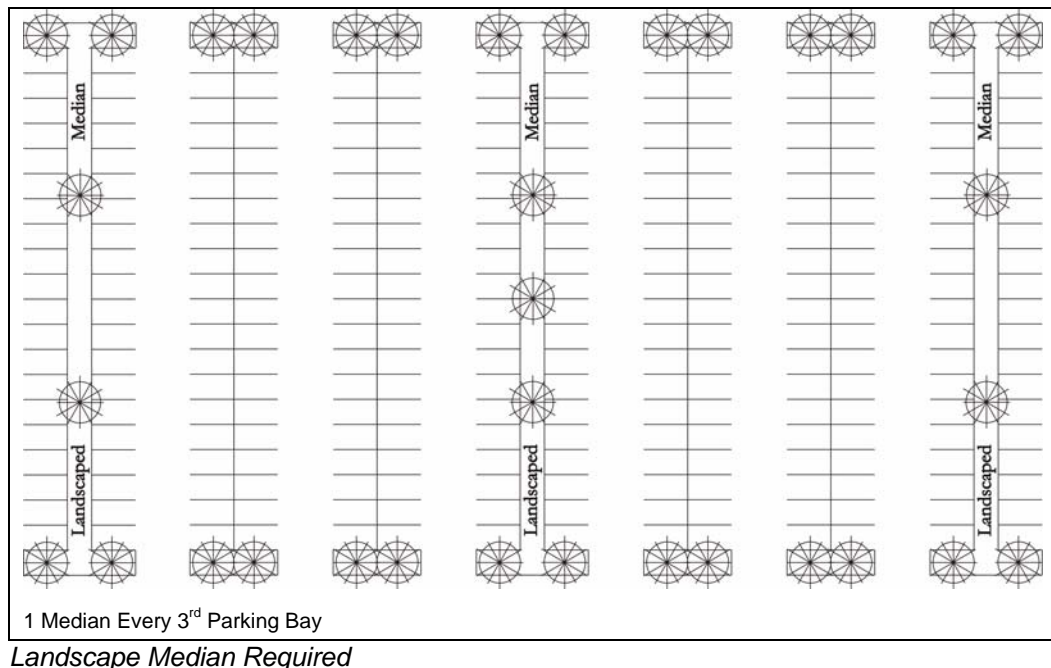
- (b) Required landscaping shall be placed within the proposed right of way and no required landscaping shall be planted on any private property.
- (c) Trees shall be placed in a manner to prevent interference with driveways, drainage areas and/or utilities.
- (d) In order to prevent damage to trees, required landscaping installed prior to completion of construction of the subdivision shall be protected as provided in Section 35.1-25.4d.
- (e) The developer shall post a performance bond for the amount of all required landscaping and installation prior to acceptance of any new road by the City. At the discretion of the developer, a cash payment may be made to the City for all required street trees, related material and installation cost. At such time a cash payment is made to the City, installation of the required landscaping becomes the responsibility of the City's Urban Forester and landscaping shall be installed within a reasonable time period.

#### Section 25.1-25.6. Parking Area Landscaping.

Parking areas are subject to the following landscaping standards:

- (a) All parking rows and parking bays shall be capped with a landscaped island.

- (b) Parking areas with less than two hundred (200) parking spaces.
  - 1. One (1) shade type tree for every eight (8) parking spaces, planted within landscape islands, reasonably dispersed within the parking area so that no more than fifteen (15) to twenty (20) parking spaces exist between landscape islands.
  - 2. One (1) medium shrub for every one (1) parking space shall be planted within landscape islands containing required trees.
- (c) Parking areas with more than two hundred (200) parking spaces.
  - 1. One (1) shade type tree for every eight (8) parking spaces, planted within landscape islands, reasonably dispersed within the parking area so that no more than fifteen (15) to twenty (20) parking spaces exist between landscaped islands.
  - 2. One (1) medium shrub for every one (1) parking space shall be planted within landscape islands containing required trees.
  - 3. One (1) landscape median six (6) feet in width for every three (3) parking bays shall be installed. The landscape median shall be required to extend the full length of the parking bay and shall include twenty (20) percent of the required parking area landscaping.

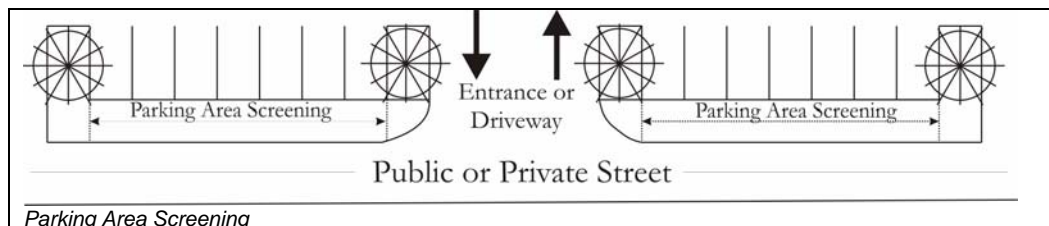


- (d) Wheel stops, curbing or other barriers shall be provided to prevent damage to required landscaping by vehicular traffic. Protection shall be installed to prevent soil erosion from the landscape area.



(e) Parking Area Screening.

1. In all instances where parking areas are adjacent to public or private streets, a continuous screen with a minimum height of three (3) feet at time of installation shall be provided along the entire length of the parking area exclusive of driveways and entrances.
2. For the purposes of this section, any of the following combination of landscaping and berms may be used to fulfill this requirement:
  - (a) One (1) large shrub per three (3) feet of street frontage.
  - (b) Earthen Berm with three (3) small shrubs per three (3) feet of street frontage.
  - (c) Earthen Berm with one (1) medium shrub and one (1) small shrub per three (3) feet of street frontage.
  - (d) Any combination of a, b or c as approved by the City Planner.
3. Earthen berms shall vary in width and height be curvilinear in form and provide a gentle tie-in with the existing grade. Average height of earthen berms used to satisfy this requirement shall be three (3) feet in height.



(f) Parking Area Exceptions.

1. Where the primary use of a parking area is for the sale of motor vehicles, recreational vehicles, trailers, boats, tractors or mobile homes the required parking area landscaping and parking area screening may be disbursed in a reasonable manner so as not to interfere with display and maintenance. Final approval for disbursement of the required landscaping is subject to the approval of the City Planner.

Section 35.1-25.7 Street Trees for Multi-Family, Commercial and Industrial Districts.

- (a) For all multi-family, commercial and industrial developments, street trees are required at the rate of one (1) shade tree for each forty (40) feet of street frontage or in the case where overhead utility lines prohibit the planting of shade trees one (1) ornamental tree for each twenty (20) feet of street frontage.
- (b) Required street trees shall be planted along the property line that fronts the street and shall not be planted within the public right of way.
- (c) Street trees within the site distance triangle may be raised to allow for visibility.

#### Section 35.1-25.8 Foundation Plantings.

- (a) All sides of multi-family, commercial and industrial buildings, which front on a public or private street and are visible from an adjacent residential district, shall be landscaped with foundation plantings as follows:
  - 1. One (1) ornamental tree per twenty (20) linear feet of building.
  - 2. One (1) large shrub per three and one half (3.5) linear feet of building.
- (b) Foundation plantings may be placed in collective groupings along the perimeter of the building for which required.

#### Section 35.1-25.9 Utility Screening

- (a) Loading areas refuse areas, storage yards, stormwater management ponds, HVAC equipment, water vaults, Reduced Pressure Zone (RPZ) devices or other objectionable items shall be screened from view of any public or private street, or any adjacent residential district.
- (b) Stormwater Management Facilities intended for display as a water feature or naturalized planting areas are exempt from screening requirements.
- (c) Screening may be accomplished by a combination of existing evergreen vegetation, walls, fences, earthen berms and new evergreen vegetation appropriate to screen the equipment or activity. The required height of screening at installation shall be sufficient to screen the equipment or activity as determined by the City Planner.
- (d) The use of chain link fence as the sole method of screening is prohibited. Where it is deemed appropriate by the property owner or developer for security purposes, it shall be screened from view as listed in paragraph (c) above.

### Section 35.1-25.10 Buffering

- (a) In all instances where a commercial district, industrial district or any parking area is located adjacent to any residential district or a multi-family residential district is adjacent to a one or two family residential district a vegetative evergreen buffer shall be established on the property for which said buffer is required.
- (b) Where required the planting area for buffering shall be a minimum of twenty (20) feet in width extending along the entire length of the property and shall generally be required along the property line unless topographic or other considerations would make it more effective located back from the property line as approved by the City Planner.
- (c) The vegetative buffer shall consist of a staggered evergreen tree line with a baseline filler of medium height evergreen shrubs. The evergreen tree line shall be planted in rows fifteen (15) feet apart and staggered ten (10) feet on center. In lieu of the baseline filler an earthen berm may be used. The earthen berm shall vary in width and height be curvilinear in form and provide a gentle tie-in with the existing grade. Average height of earthen berms used to satisfy this requirement shall be three (3) feet in height.
- (d) Where appropriate existing vegetation may be used to satisfy this requirement. Existing vegetation may be required to be supplemented with additional evergreen material as deemed appropriate by the City Planner and Urban Forester during the site development plan review process.

### Section 35.1-25.11 Tree Canopy Requirements

- (a) For purposes of this section, “tree canopy” shall include all areas of coverage by existing plant material exceeding five (5) feet in height, and the extent of planted tree canopy at maturity shall be based on the published reference text, Manual of Woody Landscape Plants, fifth edition, 1998, by Michael A. Dirr.
- (b) The planting or replacement of trees on a development site shall be required to the extent that, at a twenty (20) years, minimum tree canopies will be provided as follows:

<b>Zoning District</b>	<b>Minimum Tree Canopy Required</b>
B-1, B-2, B-3, B-4, B-5, B-6, I-1, I-2, I-3	10% of entire development site
R-4, R-5	10% of entire development site
R-3	15% of entire development site
R-C, R-1, R-2	20% of entire development site

- (c) Existing trees which are to be preserved may be included to meet all or part of the tree canopy requirements.
- (d) Existing trees infested with disease or structurally damaged to the extent that they pose a hazard to person or property, or to the health of other trees on site, shall not be included to meet the tree canopy requirements.
- (e) Tree Canopy requirements do not replace, or negate full compliance with, the requirements of any other section of the Landscaping Ordinance. However, if planting of landscaping required by this Ordinance meets or exceeds the tree canopy requirement, no further planting of trees or replacement of trees is required by this section.
- (f) In areas zoned B-4, Central Business District, B-6, Riverfront Business District or where the City Planner determines that Crime Prevention through Environmental Design (CPTED) principles apply the City Planner in consultation with the City's Urban Forester may allow the off-site planting of up to ninety-nine (99) percent of the required street trees, parking area screening, buffering and foundation plantings. Off-site planting areas shall be within the City Limits and in such location as approved by the City Planner.
- (g) The following shall be exempt from the tree canopy requirements.
  - 1. Dedicated K-12 School sites.
  - 2. Playing fields and other non wooded recreation areas
  - 3. Designated Wetlands
  - 4. Other facilities and uses similar in nature as determined by the City Council.

Section 35.1-25.12 Installation.

- (a) The planting of trees shall be done in accordance with either the standardized landscape specifications jointly adopted by the Virginia Nurserymen's Association, the Virginia Society of Landscape Designers, and the Virginia Chapter of the American Society of Landscape Architects.
- (b) All landscaping used to satisfy the requirements of the Landscaping Ordinance shall meet the specifications and standards of the American Association of Nurserymen.
- (c) Any tree used to satisfy the requirements of the Landscaping Ordinance shall be a minimum of one and one half (1.5) inches in caliper at time of planting.

- (d) No Certificate of Occupancy shall be issued until either the required landscaping is completed in accordance with an approved development plan or the property owner or developer provides a guarantee in a form acceptable to the Zoning Administrator that ensures installation.
  - 1. A guarantee for required landscaping shall be in an amount equal to one hundred twenty percent (120%) of the cost of all plants, related materials and installation. Amount is subject to approval of the City's Zoning Administrator and Urban Forester.
  - 2. All required landscaping shall be installed, inspected and approved within six (6) months of acceptance of the guarantee.
  - 3. During any water emergency declared by the governing body in which the use of water is restricted, the Zoning Administrator may permit the delayed installation of required trees, plants or screening materials. In this event, the property owner shall be required to obtain and or maintain a guarantee. After declaration of the water emergency ends, the property owner shall be required to install all trees, plants, screening and related materials within six (6) months.

#### Section 25.1-25.13 Maintenance

- (a) After the Zoning Administrator determines that all landscaping required by this Chapter is complete and in healthy condition, the property owner shall be responsible for the ongoing protection and maintenance of all required landscaping in a manner consistent with the approved site development plan.
- (b) In the event required landscaping as shown on the approved site development plan is dead or damaged, it shall be replaced by the property owner within six (6) months after notification by the Zoning Administrator. The Zoning Administrator may require a guarantee in the amount of one hundred twenty percent (120%) of the cost of all damaged or dead plants, related materials and installation.
- (c) All required, trees and shrubs as shown on the approved site development plan shall be allowed to grow until maturity and shall not be removed, unless a suitable replacement is approved by the City Planner. Pruning techniques shall be done in accordance with the standards adopted by the American National Standards Institute (ANSI), A300, Part 1, Standard 1 and the International Society of Arboriculture (ISA).
- (d) Topping of trees is prohibited.

#### Section 25.1-25.14 Stormwater Quality Credit

All landscaping required by this Ordinance or preserved as shown on an approved site development plan, shall receive a credit towards meeting water quality requirements as required by the plan approving authority.